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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/092,323	03/06/2002	Steven M. Zink	02SW049	9035	
7590 01/25/2006			EXAMINER		
Susan M. Donahue			TRUONG, L	TRUONG, LAN DAI T	
Rockwell Automation, 704-P,IP Department 1201 South 2nd Street Milwaukee, WI 53204			ART UNIT	PAPER NUMBER	
			2143		
		DATE MAILED: 01/25/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/092,323	ZINK ET AL.				
		Examiner	Art Unit				
		lan dai thi truong	2143				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on 10/14	<u>1/2005</u> .					
2a)⊠	Γhis action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠	4)⊠ Claim(s) <u>1-39</u> is/are pending in the application.						
	4a) Of the above claim(s) <u>8 and 23</u> is/are withdrawn from consideration.						
5)□	5) Claim(s) is/are allowed.						
-	Claim(s) <u>1-39</u> is/are rejected.						
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers							
9)[	The specification is objected to by the Examine	г.					
10)🛛	10)⊠ The drawing(s) filed on <u>06 March 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		atent Application (PTO-152)				

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## **DETAILED ACTION**

1. This action is response to communications: application, filed 03/06/2002; amendment filed 10/14/2005. Claims 1-39 are pending. Claims 1-2, 5, 7, 9-11, 18-19, 21, 31-33 are amended. Claims 8, 23 are canceled.

## Response to Arguments

2. Applicant's argument filed 10/14/2005 has been fully considered but they are moot in view with new ground for rejection

#### Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or descry bed as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4-5, 9 and 18-20 and 33 are rejected under 35 U.S.C 103(a) as being unpatentable over James Philip et al. (E.P. 1/104/141) in view of Graves et al. (U.S. 2002/0191250)

Regarding to claim 1, which exemplary of claims 2, 4-5, 9 and 18-20 and 33:

James Philip discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for industrial controller comprising:

A primary aggregation component associated with an industrial controller, the primary aggregation component aggregates one or more selected data items into an aggregated subset of data items, the primary aggregation component defined and installed by an entity remote from the controller: (aggregating packets to form a single packet: abstract, left column, lines 1-12, right column, lines 1-12)

A communications component that transmits the subset of data items via a singular communications packet across a network: (IP network: abstract, left column, lines 1-12)

However, James Philip does not explicitly disclose method of adds at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations

Graves discloses a method of providing additional ATM switches/ and or IP packet routers, see (Graves: [0028])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Graves's ideas of adding new a ATM switches/ and or IP packet routers into the communication network system with James Philip's system in order to increase the aggregated traffic, see (Graves: [0028])

Claims 6, 7 and 16 are rejected under 35 U.S.C 103(a) as being un-patentable over James Philip -Graves et al in view of Bowman-Amuah (U.S. 6,640,244)

## Regarding to claims 6, 7 and 16:

James Philip -Graves discloses the invention substantially as disclosed in claims 5, but does not explicitly disclose sending a response to the quest including at least one of tag and value information associated with the tag, the tag and value information relating to the subset of data items

Bowman-Amuah discloses Tag Switching assigns a single tag to all associated packets: (column 89, lines 62-67; column 90, lines 1-2).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bowman-Amuah's ideas of assigns a single tag to all associated packets with James Philip -Graves's system in order to allow routers to more efficiently transfer the tagged data, see (Bowman-Amuah: column 89, lines 62-67; column 90, lines 1-2).

Claim 10 is rejected under 35 U.S.C 103(a) as being un-patentable over James Philip
-Graves et al in view of Su et al. (U.S. 6,625,161)

#### Regarding to claim 10:

James Philip -Graves discloses the invention substantially as disclosed in claim 1, but does not explicitly disclose at least one of dynamically increasing and decreasing the amount of selected data items in the primary aggregating component based upon data demands received from the network;

However, Su discloses method of assignment and reassignment of traffic aggregates to the queues is changed dynamically, see (abstract, lines 1-12;column 2, lines 31-67; column 3, lines 47-67).

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Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Su's ideas of dynamically assignment and reassignment of traffic aggregates to the queues with James Philip -Graves's system in order to provide efficiency aggregation component

Claims 11-13, 15 and 17 are rejected under 35 U.S.C 103(a) as being un-patentable over James Philip -Graves et al in view of Bonneau et al. (U.S. 6,657,955)

## Regarding to claim 11, which is exemplary of claims 12, 15 and 17:

James Philip -Graves discloses the invention substantially as disclosed in claim 1, but does not explicitly disclose the aggregating component is an object including at least one of class attributes, instance attributes, services and data buffer

Bonneau discloses buffering packets, see (abstract: lines 1-21)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bonneau's ideas of defining n-level of hierarchy of memory partitions with James Philip -Graves's system in order to provide efficiency aggregation component

#### Regarding to claims 13:

Philip —Graves-Bonneau discloses a method as discuss in claim 11, and further discloses the instance attribute include setting for at least one of object update times, event triggers, whether to update the object based on rate, demand and other criteria, wherein a data stream triggers are located, whether to continue on an over flow, number of driers currently installed, timestamp information, size of buffers, start times, and object lifetime settings: Bonneau discloses buffer size: abstract: lines 1-21)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bonneau's ideas of defining n-level of hierarchy of memory partitions with James Philip -Graves's system in order to provide efficiency aggregation component

Claims 14 are rejected under 35 U.S.C 103(a) as being un-patentable over James

Philip –Graves-Bonneau in view of Bhatt et al. (U.S. 6,079,399)

#### Regarding to claim 14:

James Philip -Graves-Bonneau discloses a method as discuss in claim 11, but does not explicitly disclose the services include at least one of Get All Attributes, Get All List, Set Attributes List, Reset, Start, Stop, Create Object, and Delete Object

However, Bhatt discloses user selection options: (figure 5, items 21-30)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bhatt's ideas of providing user selection options with James Philip –Graves-Bonneau's system in order to conveniences to user

Claims 3 are rejected under 35 U.S.C 103(a) as being un-patentable over James

Philip –Graves in view of Bhatt et al. (U.S. 6,079,399)

#### Regarding to claim 3:

James Philip -Graves discloses a method as discuss in claim 1, but does not explicitly disclose Human and Machine Interface

However, Bhatt discloses display: (figure 5, items 21-30)

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Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bhatt's ideas of providing user selection options with James Philip –Graves's system in order to conveniences to user

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Claims 21-24, 27-30, 31-32 and 34-35 are rejected under 35 U.S.C 103(a) as being un-patentable over Bowman-Amuah (U.S. 6,640,244) in view of Wang et al. (U.S. 6,970,921)

Regarding to claims 21 and 31-32, which is exemplary of claim 22-24, 27-30, 34-35:

Luzeski discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for industrial controller comprising:

Requesting tag information from a controller; building an object from the tag information provided by the controller; installing the object on the controller; Receiving data from the object that has been updated by the controller: (Bowman-Amuah: column 89, lines 1-67)

However, Bowman-Amuah does not explicitly teach adding data items of interest to the object, the data items arranged according to at least one of contiguous and non-contiguous address memory locations

Wang discloses method of arranged data packets in contiguous and non-contiguous space in memory: (abstract, lines 1-20)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Wang's ideas of storing transmitting data in contiguous and non-contiguous buffers with James Philip –Graves's system in order to be able to statically or dynamically allocated memory, see (Wang: abstract, lines 15-20)

Claims 25-26 are rejected under 35 U.S.C 103(a) as being un-patentable over Bowman-Amuah - Wang in view of Graves et al. (U.S. 2002/0191250)

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# Regarding to claim 25, which is exemplary of claim 26:

Luzeski a method as discuss in claim 21, but does not explicitly removing the object from the controller when a client no longer requests data items of interest; removing the object based upon at least one of an event and network connections being disrupted for a time period that is greater than a predetermined amount of time that is configured at the controller: (Graves: [0028])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Graves's ideas of adding new a ATM switches/ and or IP packet routers into the communication network system with James Philip's system in order to increase the aggregated traffic, see (Graves: [0028])

2) Claim 36 is rejected under 35 U.S.C 103(a) as being un-patentable over Bowman-Amuah-Wang in view of Smith-Semedo et al. (U.S. 6,877,010)

#### Regarding to claim 36:

Bowman- Amuah-Wang discloses the invention substantially as disclosed in claim 33, but does not explicitly teach the network is at least one of an Ethernet, ControlNet, a DeviceNet, RS-232, RS-422, RS-485

However, Smith-Semedo discloses a client-server can be implemented in a Lan environment, see (Smith-Semedo: column 8, lines 31-36).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Smith-Semedo's ideas of using Lan environment with Bowman- Amuah-Wang's system in order to connect clients with server.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

# **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to lan dai thi truong whose telephone number is 571-272-7959. The examiner can normally be reached on monday- friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Dai Thi Truong Examiner Art Unit 2143

Ldt 01/19/2006

SUPERVISORY PATENT EXAMINER